

ABSTRACT OF THE DISCLOSURE

A bi-directional flow-switched packet ring protection scheme. A primary ring is the ring upon which a flow is sent unless a failure prevents it from reaching its destination node. A secondary ring is the other ring (one of the dual counter-rotating rings) on which the flow can be switched to in the event of failure to the primary ring. In a normal mode of operation, both the primary and secondary rings are functioning properly. However, if there is a failure on the primary ring, this failure is broadcast to all nodes, identifying the failed connection. These nodes then immediately redirect the flows that are affected by the ring failure onto the secondary ring. When the failure condition is removed, all sources must switch their redirected flows back on to the primary ring.

TOP SECRET